

What is claimed is:

1. A method for manufacturing a recording medium having a layer structure with at least one signal recording layer on a thermoplastic resin support substrate surface, comprising:

5 surface treating said support substrate by placing said support substrate in an active gas atmosphere, wherein said surface treating step is conducted prior to forming said layer structure on top of said support substrate.

2. A method for manufacturing a recording medium, as described in Claim 1, wherein:

10 said surface treating step results in a contact angle with water of said support substrate surface of 60 degrees or less; and

said surface treating step results in a reduction in transmittance of 400 nm ultraviolet light, compared to said support substrate prior to treatment, of 10 % or less.

15 3. A method for manufacturing a recording medium, as described in Claim 1, wherein:

after said surface treating step is complete, said active gas atmosphere is replaced with an inert gas.

20 4. A method for manufacturing a recording medium, as described in Claim 3, wherein said inert gas is nitrogen.

5. A method for manufacturing a recording medium, as described in Claim 2, wherein:

after said surface treating step is complete, said active gas atmosphere is replaced with an inert gas.

5 6. A method for manufacturing a recording medium, as described in Claim 5, wherein said inert gas is nitrogen.

7. A method for manufacturing a recording medium, as described in Claim 1, wherein said active gas is ozone.

10 8. A method for manufacturing a recording medium, as described in Claim 7, wherein said ozone is generated by at least one of an ozone generator and ultraviolet light irradiation.

9. A method for manufacturing a recording medium, as described in Claim 2, wherein said active gas is ozone.

15 10. A method for manufacturing a recording medium, as described in Claim 9, wherein said ozone is generated by at least one of an ozone generator and ultraviolet light irradiation.

11. A method for manufacturing a recording medium as described in Claim 1, wherein said support substrate is a polycarbonate or polyolefin thermoplastic resin.

12. A method for manufacturing a recording medium as described in Claim 2, wherein said support substrate is a polycarbonate or polyolefin thermoplastic resin.

13. A recording medium, having a layer structure with at least one signal recording layer on a thermoplastic resin support substrate surface, made by the process comprising:

surface treating said support substrate by placing said support substrate in an active gas atmosphere, wherein said surface treating step is conducted prior to forming said layer structure on top of said support substrate.

14. A recording medium as described in claim 13, wherein:

said surface treating step results in a contact angle with water of said support substrate surface of 60 degrees or less; and

said surface treating step results in a reduction in transmittance of 400 nm ultraviolet light, compared to said support substrate prior to treatment, of 10 % or less.